

Claims

1. Apparatus for making fibre balls from a fibrous product, where the apparatus (2) includes an inlet (4) for fibrous products and an outlet (6) for fibrous balls, where the apparatus (2) includes a cylindric housing (8), where the apparatus (2) includes a centrally disposed, through-going rotating shaft (10) that is driven by a motor, where a number of radially outwards directed wings (12) are secured to the shaft (10) and are interacting with the internal wall (14) of the cylindric housing (8), where the cylindric housing (8) on the inner wall (14) includes at least one axially extending projection (16), where the projection (16) of the inner wall interacts with the front edge (18) of the outwards projecting wings (12), where the axially extending projection (16) is designed with radially and inwards directed teeth (20), and where the front edges (18) of the outwards directed wings (12) are designed with radially outwards directed teeth (22), **characterised in that** at least one of the radially outwards directed wings (12) is angularly displaced relative to the longitudinal axis of the wing (12) for achieving an air flow through the apparatus.
10
15
2. Apparatus according to claim 1, **characterised in that** the front edge (18) of the outwards directed wings (12) are angularly displaced relative to the longitudinal axis of the wing (12), whereby the radially and outwards directed teeth (22) interact with a plurality of the radially, inwards directed teeth (20) of the projections (16).
20
3. Apparatus according to any of claims 1 - 2, **characterised in that** the outwards directed wings (12) are angularly displaced relative to the longitudinal axis of the wing (12) with different angles.
25
4. Apparatus according to any of claims 1 - 3, **characterised in that** the inner wall (14) of the cylindric housing (8) includes a number of axially extending projections (16) that are provided with angular intervals on the cylindric inner wall (14).
30
5. Method for making fibre balls from a fibrous product in a machine that include a cylinder containing a number of wings secured to a rotating shaft that is driven by a

motor, where the inner wall of the cylinder includes radially inwards directed projections for forming a turbulent flow of fibres and air, where the front edges of the wings are compressing the fibres by close contact with the projections of the cylinder, where the compressed fibres form fibre balls by repeated contact with the rotating wings and
5 the inner wall of the cylinder.